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LOCKHEED MARTIN

May 23, 2012

Mr. Bob Schwarz
Oregon Department of Environmental Quality
400 E. Scenic Drive, Suite 307
The Dalles, Oregon 97058

Subject: Northwest Aluminum Company site (ECSI Site ID: 4793)
No Further Action determination for Northwest Aluminum site

Dear Mr. Schwarz:

Lockheed Martin Corporation ("Lockheed Martin") objects to the Oregon Department of Environmental Quality's ("DEQ") proposed No Further Action ("NFA") determination for the Northwest Aluminum Company ("NAC") site located at The Dalles, Oregon, at 3313 West Second Street, ESCI No. 4793 ("Site"). As revealed by NAC's own investigation, fluoride remains at the Site at levels in excess of cleanup standards imposed by the United States Environmental Protection Agency's ("EPA") 1988 Record of Decision and 1999 Consent Decree, a condition caused by NAC's Site operations. DEQ's proposed NFA determination would directly conflict with EPA's conclusions and undermine EPA's ability to ensure the integrity of the existing remedy for the Site. DEQ should not issue an NFA determination for the Site at this time.

Site Operational History

The Site is part of a larger facility historically used for aluminum operations. Harvey Aluminum, Inc., ("Harvey Aluminum") began operating an aluminum smelter at the facility in the late 1950s. Harvey Aluminum became Martin Marietta Aluminum, Inc., ("MMA") in 1972 as a result of a series of stock purchases by Martin Marietta Corporation ("MMC"). MMA, an MMC subsidiary, owned and operated the facility until 1984.

MMA transferred the facility to MMC in 1984. In late 1986, MMC entered into an agreement to lease and then sell the facility to NAC. NAC purchased most of the facility in 1990 and 1991, which it continued to utilize for aluminum operations until entering bankruptcy under Chapter 11 of the United States Bankruptcy Code in 2003. As a result of the bankruptcy, NAC now claims to be "a separate legal entity from the former Northwest Aluminum Company"[1] but continues to own the Site. Lockheed Martin understands that NAC is attempting to sell the Site to an unrelated entity for an unknown purpose, which prompted NAC's request for an NFA determination.

[1] NAC Remedial Investigation, Risk Assessment, and Remedial Action Report, at ES-1 n.1, 2-5, 2-6.

Lockheed Martin's Remediation

EPA placed the facility, which included the Site, on the National Priorities List ("NPL") in 1986. MMC subsequently conducted an extensive CERLCA remediation pursuant to a 1988 Record of Decision and a 1989 Consent Decree entered by EPA, DEQ, MMC, and Commonwealth Aluminum Corporation. In relevant part, the Record of Decision requires maintenance of fluoride levels at the facility's shallow S-Aquifer at or below 9.7 mg/L and requires Lockheed Martin to consider remedial action if this criterion is exceeded. The S-Aquifer extends under and is impacted by the portion of the facility subject to the proposed NFA determination; thus, the 9.7 mg/L action level applies to Lockheed Martin within this area.

EPA issued a certificate of completion to MMC in 1995 and removed the facility from the NPL in 1996. Following delisting, MMC (then Lockheed Martin[2]) continued to perform post-closure operation, maintenance, and monitoring ("OM&M") under EPA's direction. EPA transferred oversight responsibilities to DEQ in 2004 under a Memorandum of Understanding ("MOU") between the agencies; however, EPA retains ultimate authority.

Lockheed Martin and its contractor continue to perform the OM&M activities specified in EPA's 1988 Record of Decision, primarily groundwater monitoring, landfill inspection, and leachate collection and treatment, under a DEQ-issued RCRA permit. In 2010, DEQ conducted its fourth five year review for the facility. EPA commented on the review on March 30, 2012. With respect to fluoride, EPA found:

> The use of Alternate Concentration Limits (ACLs) for fluoride in the S-Aquifer does not now appear to be appropriate based on EPA's legal interpretation of use of ACLs outlined in the attached 2005 Memo. In addition, EPA's Groundwater Restoration Policy of 2009 outlines the expectation of returning groundwater to beneficial reuse based on use of drinking water standards such as Maximum Contaminant Levels (MCLs). This issue was raised in the Third Five Year as an action item and has not yet been addressed. Based on these policies, the appropriate comparison criteria for the monitoring recommended in Comment No. 3 above should be based on the 4 ug/l MCL for fluoride, rather than the 9.7 ug/l ACL in the current ROD.[3]

Northwest Aluminum's Request for NFA

NAC has been performing demolition and investigation at the Site since 2007 for the singular purpose of attaining an NFA determination from DEQ. As part of its investigation, NAC documented S-Aquifer fluoride levels up to 34.6 mg/L in newly installed monitoring wells beneath the footprint of the main potline building, and up to 64.1 mg/L in a sump sample. The report attributed the elevated fluoride in the sump to recent operations, stating that:

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[2] MMC merged with Lockheed Corporation in 1995, forming Lockheed Martin.

[3] Units incorrectly referenced as "ug/L" should be "mg/L."

> The only sample exceeding the screening level for fluoride (57 mg/L) was detected in the former west Aluminum Reduction building sump at a concentration of 64.1 mg/L. This sample may have been a mixture of Perched Aquifer water and roof runoff, and likely contained some fluoride-enriched dust from materials handled within the reduction building, such as cryolite (which is 79.2 percent fluoride by weight).

NAC's recent investigation also documented that fluoride in soil ranges up to 23%, with the maximum soil hot spot very close to where a sump sample exhibited a concentration of 64.1 mg/L. This indicates that NAC's recent management of fluoride-bearing cryolite has impacted soil and groundwater. The report also documents that NAC disposed of concrete from the demolished aluminum processing building within the former aluminum production building footprint after receiving DEQ approval. Fluoride in leach tests of this concrete ranged up to 59.7 mg/L (December 31, 2008 memo from CH2M Hill to DEQ). The similarity between this value and the maximum values measured in site groundwater (34 to 64 mg/L) suggest that the concrete disposal action has caused or exacerbated the fluoride groundwater plume.

DEQ Should Not Issue An NFA Determination For The Site

DEQ's NFA decision would contravene EPA mandated cleanup standards applicable to the Site. As set forth above, the Record of Decision establishes a maximum fluoride level of 9.7 mg/L for the S-Aquifer and EPA's recent comment letter indicates that it might impose an even more stringent level of 4 mg/L. Because DEQ's proposed NFA determination would allow fluoride levels to persist far above these standards, such a determination would be wholly inappropriate. At the very least, the proposed NFA should be referred to EPA for a decision consistent with its history of regulatory action at the Site.

DEQ's determination would also negatively impact Lockheed Martin. Lockheed Martin has been diligently performing OM&M at the facility under DEQ's supervision (and EPA's ultimate authority) for many years. DEQ should not issue an NFA to NAC for property at which Lockheed Martin is bound to Record of Decision-specified standards, especially given that NAC's recent operations appear to have frustrated these efforts. Lockheed Martin would be happy to meet with DEQ and NAC to discuss these issues. However, for the reasons set forth above, Lockheed Martin does not support issuance of the NFA.

Sincerely,

Brad Owens
Director, Environmental Remediation

Cc: Scott Tillman, NAC
Lynden Peters, Arcadis